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### REMARKS

Applicants cancel claim 24. Claims 2-3 have previously been canceled. Claims 1, 4-23, and 25-28 remain pending in the application. Applicants amend claim 22 to incorporate the features of canceled claim 24, and amend claims 1, 8, 10-11, 13, and 15 for clarification. Applicants amend claim 25 for proper dependency. No new matter has been added.

Applicants respectfully request that the Examiner acknowledge the receipt of all certified copies of the priority documents for the 35 U.S.C. § 119 priority that the Examiner has already acknowledged. Applicants also request that the Examiner return an initialed and signed copy of the PTO-1449 form attached to the Information Disclosure Statement ("IDS") filed concurrently with this application that shows consideration of U.S. Patent No. 6,208,619 listed therein. Applicants further request that the Examiner indicate acceptance of the drawings.

Claims 1, 4-5, 8-11, 13, 15, and 22-23 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over European Patent Application Publication No. EP 0967559 to Chueng-Hsien in view of "Multiwavelength Cross-Connects for Optical Transport Networks" by Zhong et al.; claims 6-7, 12, 14, 16-21, and 24-26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chueng-Hsien and Zhong et al., and further in view of U.S. Patent No. 5,253,248 to Dravida et al.; and claims 27 and 28 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Chueng-Hsien and Zhong et al., and further in view of U.S. Patent No. 6,425,005 to Dugan et al. Applicants amend claim 22 to incorporate the features of canceled claim 24, and amend claims 1, 8, and 13 in a good faith effort to further clarify the invention as distinguished from the cited references. Applicants respectfully traverse the rejections.

The Examiner cited and relied upon the "steady-state" operation described in Chueng-Hsien as alleged disclosure of the features of the claimed network cache apparatus. The cited

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portions of Chueng-Hsien only describe, however, a sender-driven scheme ("EURCa-S") and a receiver-driven scheme ("EURCa-R"), wherein a sender monitors the status of a receiver in the former and the receiver monitors periodic signals from the sender in the latter to ensure proper data delivery from the sender to the receiver.

Therefore, Chueng-Hsien, as cited and relied upon by the Examiner, does not disclose or suggest the claimed features of storing data for a valid term, which is based on a distribution valid term received with the data from a distribution server, and transmitting the stored data when there is no congestion.

The Examiner relied upon Zhong et al. as a combining reference to specifically address the claimed features relating to optical cross-connect equipment and wavelength multiplex transmission. As such, the combination of this reference would still have failed to cure the above-noted deficiencies of Chueng-Hsien, even assuming, arguendo, that it would have been obvious to one skilled in the art to combine these references at the time the claimed invention was made.

In other words, Chueng-Hsien and Zhong et al., as cited and relied upon by the Examiner, do not disclose or suggest,

"[a] data distribution system comprising:  
a data distribution server for supplying data to a user side;  
at least one access server provided on the user side and  
transferring intended data to each user; and  
a network cache apparatus provided in a network wherein  
said data is distributed between said data distribution server and  
said access server, said network cache apparatus having a cache  
function unit for temporarily storing said data from said data  
distribution server and an exchange function unit for routing the  
stored data to said access server corresponding to a destination  
user, said cache function unit storing said data for a valid term  
based on a distribution valid term transferred from said distribution  
server simultaneously with said data, the stored data being

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transmitted to said access server in the absence of a congestion state, wherein

both said data distribution server and network cache apparatus and both said network cache apparatus and access server are connected via an optical cross-connect equipment forming said exchange function unit of the network cache apparatus and said data is distributed by wavelength multiplex transmission," as recited in claim 1. (Emphasis added)

Accordingly, Applicants respectfully submit that claim 1, together with claims 4-5 dependent therefrom, is patentable over Chueng-Hsien and Zhong et al., separately and in combination, for at least the foregoing reasons. Claims 8 and 13 incorporate features that correspond to those of claim 1 cited above, and are, therefore, together with claims 9-11 and 15 dependent therefrom, respectively, patentable over the cited references for at least the same reasons.

The Examiner relied upon Dravida et al. to specifically address the claimed features relating to congestion. As such, the combination of this reference would still have failed to cure the above-described deficiencies of Chueng-Hsien and Zhong et al.—with respect to the claimed features relating to valid term—even assuming, arguendo, that it would have been obvious to one skilled in the art to do so at the time the claimed invention was made. Accordingly, Applicants respectfully submit that claims 6-7, 12, 14, 16-21, which depend from claims 1, 8, and 13, respectively, are patentable over the cited references for at least the above-stated reasons.

With respect to claims 22-23 and 25-26 incorporating the features of canceled claim 24, as shown in Figs. 26 and 27 of Dravida et al., the technique described therein provides an alternate route in advance for bypassing a route that falls into a "congestion state." This "congestion state" is found by measuring a "mean buffer occupancy (X)" of an output buffer and then detecting that the measured mean buffer occupancy (X) exceeds a predetermined threshold

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value (T). Once the excess of (X) from (T) is detected, data is transferred through the alternate route. Therefore, Dravida et al. only describe estimating the congestion state of an opposing node to be connected from the stored amount of data in an output buffer. Please see, e.g., the abstract of Dravida et al. Dravida et al., as cited and relied upon by the Examiner, do not disclose or suggest the claimed features relating to congestion inquiry.

In other words, even assuming, arguendo, that it would have been obvious to one skilled in the art to combine Chueng-Hsien, Zhong et al., and Dravida et al. at the time the claimed invention was made, such a combination would still have failed to disclose or suggest,

“[a]n access server placed outside of a network communicating with a network cache apparatus provided in said network for receiving data from the outside and temporarily storing this and routing the stored data to a user side, fetching said data stored in the network cache apparatus, and distributing this to a user,

wherein provision is made of a congestion monitor responding unit for performing a related inquiry in response to an inquiry request of a congestion state from said network cache apparatus and returning the result to the network cache apparatus as the inquiry response, and

wherein both said network cache apparatus and access server are connected via an optical cross-connect, and said data is distributed by wavelength multiplex transmission,” as recited in claim 22. (Emphasis added)

Accordingly, Applicants respectfully submit that claim 22, together with claims 23 and 25-26 dependent therefrom, is patentable over the cited references for at least the above-stated reasons.

The Examiner cited Dugan et al. to specifically address the additional features recited in claims 27 and 28. As such, the combination of Dugan et al. would still have failed to cure the above-described deficiencies of Chueng-Hsien and Zhong et al. even assuming, arguendo, that it would have been obvious to one skilled in the art to do so at the time the claimed invention was

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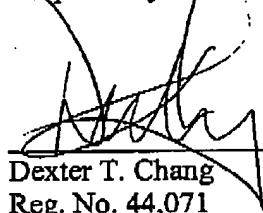
made. Accordingly, Applicants respectfully submit that claims 27 and 28, which depend from claim 1, are patentable over the cited references for at least the above-stated reasons.

The above statements on the disclosure in the cited references represent the present opinions of the undersigned attorney. The Examiner is respectfully requested to specifically indicate those portions of the respective reference that provide the basis for a view contrary to any of the above-stated opinions.

In view of the remarks set forth above, this application is in condition for allowance which action is respectfully requested. However, if for any reason the Examiner should consider this application not to be in condition for allowance, the Examiner is respectfully requested to telephone the undersigned attorney at the number listed below prior to issuing a further Action.

Any fee due with this paper may be charged to Deposit Account No. 50-1290.

Respectfully submitted,



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